

20001016 073

Reproduced From  
Best Available Copy

September 1979

# Countermeasures: Motivating for Safe Performance



**safety management  
concepts series**



UNITED STATES ARMY SAFETY CENTER ■ FORT RUCKER, ALABAMA

## CONTENTS

	<u>Page</u>
MOTIVATION	
1. Introduction . . . . .	1
2. A Theoretical Foundation . . . . .	3
3. Key Task Identification. . . . .	3
4. Task Assignment. . . . .	4
5. Accountability . . . . .	6
6. Rewards and Punishment . . . . .	7
7. Summary. . . . .	9
APPENDICES	
A. Maslow's Hierarchy of Needs . . . . .	10
B The Lackland Project . . . . .	18
C Group Motivation . . . . .	20
D Positive Reinforcement . . . . .	27
E Safety Promotion . . . . .	31

## MOTIVATION

### Introduction

If only I could motivate command support! If only I could get middle managers to support the program! How can I get these operators to apply the safety skills I know they have? The statements and questions above are among the most common heard in the Army safety program. They reflect the realization that although improved engineering and training can contribute greatly to safer performance, the real key to maximum safety rests in the motivational sphere. The safety manager who can best answer the question, "How can I get people to do the things I want them to do?" will be the safety manager who gets the best overall results. From that question, we will formulate our working definition of motivation, i.e., getting people to do the things we want them to do.

The "people" we are talking about in the above definition are all the people that go into making a safety organization. The commander must do certain things we want him to do, the staff, middle managers, and supervisors must also perform certain tasks. The mass of operators must be developed into a situation in which more and more often they do things the way we want them done. Similarly, our own safety staff and indeed, we ourselves, must be led to do things the way we want them done. Thus the safety manager's interest in motivation sweeps across and up and down the organization touching wherever there is a task that is important to safety or the organization.

Those who question the power of motivation as an effective accident prevention tool need only review the record of the Dupont Chemical Corporation. Figure 1 shows the performance of Dupont compared to some counterpart organizations. As you can see, Dupont completely outclasses all the rest in the accident prevention area. While Dupont has competent safety engineering and a well thoughtout and implemented safety training program, there can be little doubt that Dupont's record has been achieved primarily because Dupont has succeeded in motivating safe behavior throughout the corporate structure. Clearly motivation can achieve results of startling dimensions!

In this booklet we are going to examine the process of motivation in depth. We are going to look at exactly what we are trying to motivate focusing on the necessity of identifying the tasks that are essential if we are to achieve safety's goals in support of mission accomplishment. We will

FIGURE 1  
DUPONT PERFORMANCE

All Industry	10.20
Chemical Industry	6.00
Army	2.92
Dupont	.21

Note: If the Army had reduced its civilian disabling injury rate to that of Dupont, the results would be as follows:

2,000 injuries reduced to 140.

\$12,000,000 in cost reduced to \$840,000.

FIGURE 2

Injury Prevention--Preventing injury to Army personnel and those involved with the Army.

Damage Control--Preventing damage to property as a result of Army operations.

Legal Mandate Compliance--Obeying legal mandates.

Mission Protection--Preventing interruption of Army missions due to accident events.

Liability Limitation--Reducing the likelihood of law suit or claim against the Army.

Management Improvement--Taking advantage of non-safety benefits of accident prevention activity.

look at methods for finding these tasks, establishing standards, getting them assigned and assuring some kind of accountability. Finally we will grapple with the problem of rewards and punishment and see how the safety manager can deal with the problem of making safe performance make a difference.

### A Theoretical Foundation

Ultimately the only behavior that interests the safety manager as a manager is behavior that is relevant in some way to his mission in support of the command mission. Accordingly, he is not interested in motivating military courtesy, respect for the flag and motherhood, high productivity, etc., unless these behaviors also support in some significant way achievement of specific safety missions. Thus the safety manager must logically begin his search for a safety motivated organization in the mission of the organization and more especially in the mission of his office. Figure 2 depicts these missions as they exist in the typical organization. We can conclude from figure 2 that the safety manager's job is to elicit from every segment of the organization the behaviors that contribute to injury prevention, damage control, liability limitation, management improvement, safety law compliance, and mission protection. In attempting to depict the motivation process, it seems entirely proper to begin by depicting the mission roots of motivation as shown in figure 3.

### Key Task Identification

Given a thorough understanding of the safety mission, the next step is determination of the specific tasks necessary to achieve the mission. These tasks will involve many people and will vary considerably in importance. Identifying the tasks we want the commander to execute will probably have top priority. At the other end of the spectrum the safety related tasks performed by the GS-3 clerks will be of far less importance. The relative importance of any task is determined by its overall impact on the mission of the safety program. Thus in some respects the task performance of certain tasks by an explosives operator may be of more importance than almost any other task in the organization because the slightest mistake on his part could produce 40 or 50 fatalities and millions in damages and law suits. Thus every task has a safety "value" which is determined by the importance of the task to the safety mission. The safety manager's job is to determine which tasks are important and assign a priority to

them so that he can assure that available resources are committed to motivational efforts in a rational manner. Tasks are critical because people perform tasks when the motivational climate is right and don't perform them when it is wrong.

There are several practical techniques for determining key tasks and prioritizing them. These are based on information collecting procedures.

1. Systems analysis. In reviewing the organization for high frequency or high severity potential activities (injury, damage, notariety law violation, etc), it is usually not difficult to identify the tasks and individual jobs critical to these activities.

2. Accident Experience. Analyses of accident data will indicate where actual losses are being experienced. The associated tasks and individual jobs can be readily identified.

3. Job Hazard Analysis. Job hazard analysis will reveal quickly key tasks of accident prevention interest.

4. Mission Analysis. Focus in key mission components and those jobs central to those missions.

Some motivation may be directed toward broad tasks that involve all or most employees. An example is "Follow the Safety Rules for Your Job." These broad activities are important because they represent a baseline appropriate for every employee. They are usually only a baseline; however, against which more comprehensive activities can be undertaken for selected high priority tasks.

For many tasks, simply identifying the existence of a task is not enough. It will often be necessary to specify a standard for the task. Thus rather than simply stating that the Provost Marshal will "participate in the vehicle safety program" it may be desirable to specify exactly what he will do and how he must do it. In the absence of such standards the provost marshal's understanding of "participation" may be totally inadequate from a safety point of view.

#### Task Assignment

Through the various techniques described above, a safety manager should be able to identify a number of key tasks

FIGURE 3  
THE MOTIVATION MODEL

MISSION

TASK I.D.

TASK  
ASSIGNMENT

ACCOUNTABILITY

REWARDS &  
PUNISHMENT

SAFE  
BEHAVIOR

Task Identification: Identifying task behaviors that have special safety relevance and determining acceptable levels of performance, i.e., those that result in acceptable risk levels.

Task Assignment: Insuring that an individual responsible for a key safety behavior is fully aware of that responsibility and of the performance standards expected.

Accountability: Establishing the means by which a responsible individual and others can evaluate safety task performance against a standard.

Rewards and Punishment: Insuring that achieving prescribed performance levels is reinforced and that failure to achieve prescribed levels is punished if appropriate.

Safe Behavior: Operational or management task performance based on suitable training and suitable motivation that results in acceptable risk levels.

FIGURE 4  
TASK ASSIGNMENT TECHNIQUES

SOPs

Verbal Order

Job Description

Command Letter

Signs

For supervisors--Proposals of compelling logic.

Training

Safety Committee

associated with a variety of jobs. Just because the safety manager perceives these tasks doesn't mean that the person who is supposed to perform them does. Very often this point is where motivation problems originate. The safety manager feels task X should be performed by holders of job 2. The holders of job 2 don't see it that way, however, and don't perform the task. The safety manager's job then is to see that people who have key safety tasks know and accept the fact that they have the tasks.

The techniques for a task assignment are many and varied. Generally speaking, it is desirable to get tasks institutionalized by getting them written into SOPs, job descriptions, organization and function manuals, etc., rather than simply getting an informal agreement. Such institutionalizing assures continuity of task assignment. Figure 4 lists some of the techniques for getting tasks assigned.

This is probably a good point to recap. We have looked at the organization mission and from it derived a safety mission. We have looked at this safety mission and from it we have identified a number of key safety related tasks. We have established standards for these tasks as appropriate. Then we have used a variety of techniques to gain task acceptance from the persons responsible for performing them.

### Accountability

At this point, the safety manager becomes concerned with establishing accountability for task accomplishment. We are only concerned with measuring task performance, not with rewarding or punishing that performance. Thus, accountability is a measuring process that provides a rational basis for later distributing rewards and punishments. The tools of accountability are fairly obvious: the survey, the accident investigation, the supervisor, and the periodic review of key indicators such as in a Quarterly Report and Analysis. The key point is that before a person can determine how well he is doing or somebody else is doing, it is necessary to measure performance against a standard. If tasks have been carefully identified and assigned, accountability is not difficult. If these basic preliminary steps have not been followed, it will prove impossible since no one will know for certain what is expected or who is to do it.



## Rewards and Punishment

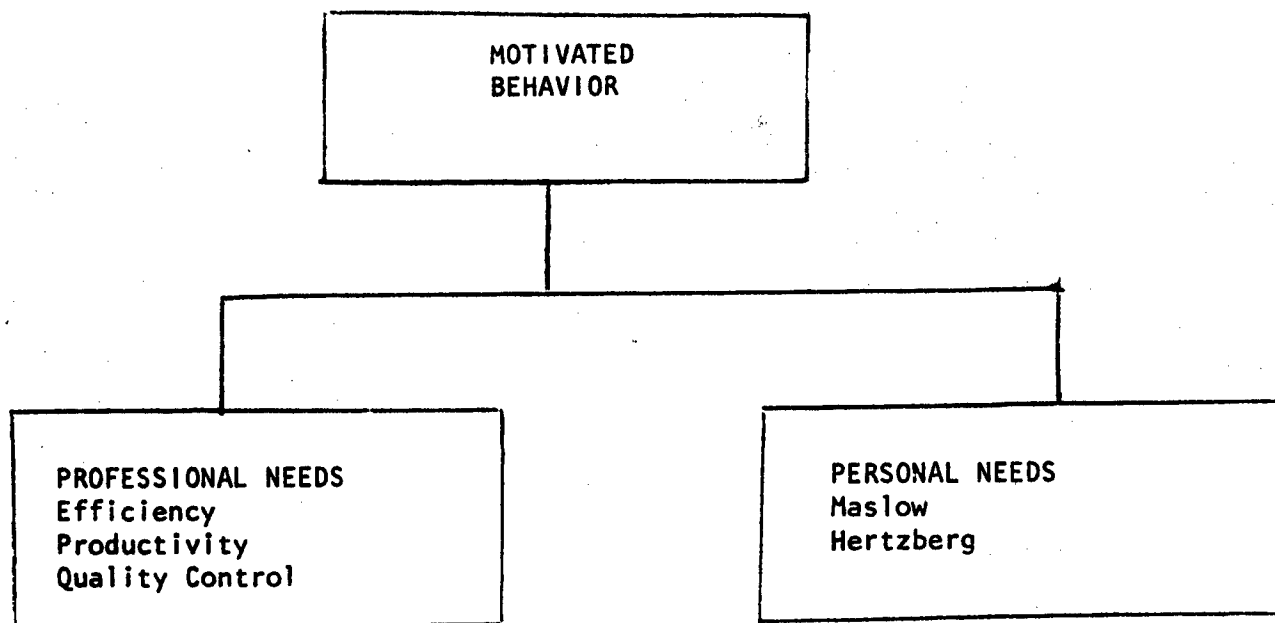
The social sciences have made considerable progress in the last 20 years in establishing the nature of this final critical component of the motivation process. They have shown that people do things for a reason and that reason is because doing them fulfills a need (reward) or avoids an undesired result (punishment). People perform safety tasks for the same reasons. Unless the safety manager can make safety task performance make a difference, i.e., produce a reward or avoid a punishment, he is not likely to get any significant degree of task performance. Thus the ability to bring rewards and punishment to bear is the payoff to the motivation process.

Figure 5 depicts the two basic kinds of rewards and punishment we are concerned with--organizational and personal. The safety manager looking for maximum impact will seek to employ both. For example, in dealing with a personnel officer the safety manager would point out the organizational implications of a safety task such as those shown in figure 5. He would also highlight the personal considerations that might apply, such as keeping up with other staff sections, gaining favorable recognition, or avoiding embarrassment.

Looking at organizational needs first, we can see with a modest amount of reflection that safety often has a great deal to contribute to other organizational functions just as they have a great deal to contribute to safety. The safety manager will want to use these interfunctional interests to his advantage.

Using personnel needs is more complex. Fortunately, social sciences have made a great deal of progress in the past 20 years. Men such as Abraham Maslow, Frederick Herzberg, and B. F. Skinner have experimentally demonstrated the basis of motivation. Maslow's Hierarchy of Needs is an important concept. Appendix A contains a discussion of Maslow's Hierarchy of Needs with some practical concepts for application. Briefly stated, one controls behavior by fulfilling an unsatisfied need or threatening an already satisfied need. The Lackland case described at Appendix B is an excellent example of the effectiveness of negative reinforcement. By threatening security and self-esteem, a remarkable change in behavior was produced with an excellent cost benefit ratio. The Lackland case took advantage of the power of the group to influence behavior. Appendix C contains a discussion of the role of formal and informal groups as factors in the motivation process.

FIGURE 5



## PERSONNEL PROBLEM

### SUPERVISORY CONTROL AND TRAINING

**Definition:** Identifies a problem related to management of people and the training they receive before and after the task assignment.

This item provides the training function with a bank of information about problems related to supervisory control and training.

Analysis of each accident will provide evidence as to the adequacy or effectiveness of past training and will help management in identifying what additional training is needed.

Code	Supervisory Control and Training	Comment
00	Training and supervisory control is in no way connected with the error or condition defect in this accident situation.	Check this code with care as in most instances, there can be an element of training to be considered.
01	Need a better trained person but unavailable	Understaffed, employment problem, training needs not being met.
02	Emergency task, no time to train	
03	Work pressure allows no time to give adequate training.	Seasonal difficulties, train before sending to field.
04	Close supervision impossible due to circumstances	Great distance between employees, too many people for one supervisor.
05	Skill proficiency needs upgrading, retesting or re-training.	One-time training not enough for this work—provide periodically.
06	Trained employee did not follow what he had been taught.	Local needs growing, not being provided
07	A solo assignment where additional help was needed	Review policy—in view of hazard, two may be a better decision.
08	Work unauthorized	Disciplinary action
09	Written instructions needed	Not a simple matter of supervision
10	Services of prof. safety officer needed	
**	<u>If a specific training category can be related to the accident problem in any way, it would help support training needs be checking:</u>	
11	Orientation to-the-job for temporary and regular hires	
12	Management training for supervisors	
13	Technical, scientific, professional training	
14	Skill training for office, clerical people	
15	Skill training for particular trade or craft involved	
16	Safety management for supervisors	
17	Communication between supervisor and employees	
18	Defensive driving	

As mentioned earlier, Dupont has achieved remarkable accident prevention results by clearly identifying safety related tasks, assigning those tasks, establishing vigorous accountability, and then consistently applying punitive measures to employees who don't meet standards. Other programs dealing with the problem of drinking and driving conducted at Ft. Campbell and Ft. Hood have also produced dramatic results. Clearly, negative incentives can produce dramatic accident prevention results over a sustained period if knowledgeably applied.

Positive incentives have equally exciting potential. Appendix D depicts how the Emery Air Freight Company achieved some remarkable behavior changes applying simple reinforcement. The formula is simple--provide performance feedback to employees and reward any behavior that is a movement toward the desired behavior goal. The appendix depicts such behaviors and shows some safety applications of positive reinforcement. Obviously positive reinforcement has exciting applications in the accident prevention field.

The combined application of the Dupont/Lackland pattern of negative incentives with the Emery pattern of positive reinforcement appears to offer a behavioral technology of very high effectiveness and considerable reliability. Indeed all the tools the safety manager should need to manage behavior are available now. He need only apply them.

Normally, motivational programs, either positive or negative, are carried out through the chain of command with the first line supervisor playing an important role. It is also possible for the safety manager to directly conduct effective motivational programs using safety promotion concepts. These techniques properly applied have proven their effectiveness usually with a high cost benefit ratio. They appear particularly effective as adjuncts to other countermeasure programs. Appendix E contains some detailed guidance on conducting effective promotional programs.

### Summary

Using the above outlined procedures, getting people to do the things we want them to do is no longer a mystery; rather it is a series of specific steps. Appendix F depicts the applications of the process to a specific task. If we identify key safety tasks, get them assigned, establish accountability and apply meaningful positive and negative incentives, an improved motivational climate will be just as sure as is sunrise tomorrow morning. No more mysteries, just a job to be done.

## APPENDIX A

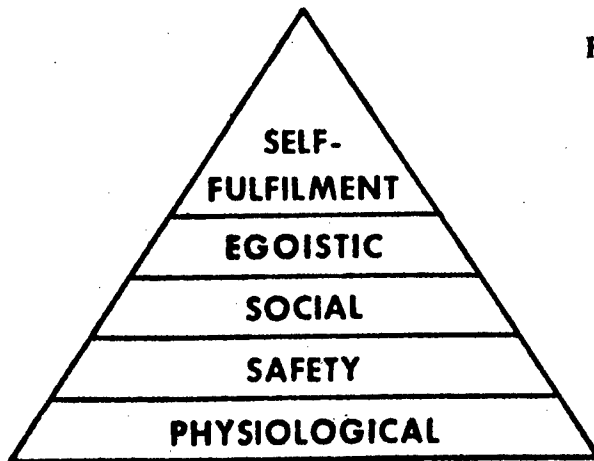
### MASLOW'S HIERARCHY OF NEEDS

#### 1. INTRODUCTION.

a. Although Freud and another group of psychologists called the "Behaviorists" contributed a great deal to the field of psychology, probably the big name in 20th century psychology, or at least the name that is currently drawing more followers, is Abraham Maslow. Dr. Maslow was Chairman of the Department of Psychology at Brandeis University and president of the American Psychological Association in 1962-63. A respected, much admired psychologist, his work is the basis of much of the so-called human relations technique of managing people. As managers, it is important that you understand the theories of Dr. Maslow; as safety managers, it is important that you be able to use his knowledge to get things done through other people. In other words, to effectively deal with people, it is necessary to have a basic understanding of what makes people run.

2. MASLOW'S HIERARCHY OF NEEDS. Dr. Maslow first decided, from his work with patients, graduate college students, and other professionals in the field of psychology, that the human being is motivated by a number of basic needs which are species-wide and apparently unchanging; further, he postulated that these needs occur in a hierarchy--that some needs must be reasonably satisfied before others can emerge. He determined that an unmet need, a need that is unfulfilled, will cause the person to behave in such a way that he will satisfy that need.

a. The physiological needs. For example, the first need of every human is to survive--he needs food, liquid, shelter, sleep, oxygen. A starving person will seek food; all his energies and thoughts will be directed toward food. A man who is starving does not care if he will get a promotion, whether his friends think he is a good fellow, whether his wife does or does not love him, or whether he breaks 90 on the golf course. His only concern is that he is hungry. The same is true of the other basic physiological needs; when they are seriously unfulfilled, all motivation of that person is directed toward solving those needs. In addition, these basic physiological needs are recurring--because I had a good night's sleep last night does not mean that I will not sleep again; because I just had a drink of water does not mean that I will not ever drink again. These needs will arise, be met, arise, be met until the human dies. In our



**Hierarchical Structure of Needs.**

- Desire for personal growth.
- Prestige, success and self-respect.
- Identification, recognition and affection.
- Security and health.
- Shelter, hunger, thirst and sex.

own lives as working safety managers, these needs are of little value in getting things done. Unfortunately, you cannot starve your commander into supporting your safety program!

b. The safety-security needs. The second set of needs, those which emerge after the basic physiological needs are met, are those Dr. Maslow called the safety needs, or sometimes safety-security needs. Humans need a predictable world, a world around them that makes sense to them, that is consistent with what they deem "normal" or "routine." There are patterns to our lives, patterns which make us feel secure; e.g., stoplights, buildings, laws, jobs, time sequences, people who behave in predictable ways. It is not necessary for us to try to figure out each morning how to get to work because the streets and traffic patterns have not changed from the day before. We expect people to behave toward us in ordinary, consistent ways; we don't have to figure out how to treat each individual we meet because there are patterns of social behavior which are used between persons.

(1) Many people who are the correct age to have lived through the Great Depression are motivated by these needs, sometimes almost to the exclusion of other needs. It has been a criticism of many Government employees that they are security-conscious, that they are so fearful of losing their jobs that they will not "rock the boat" with a new idea because it may cause displeasure in their bosses and, therefore, threaten their job security. The reason they started to work for the Government in the first place was because it had the greatest security of any job around.

(2) A person who, for one reason or another, suffered deprivation in his childhood becomes insecure, a great worrier

over trivial details, and frequently behaves as though some sort of catastrophe were about to occur. He will avoid the strange, new, or unexpected if at all possible; he will go to great lengths to arrange his life so that it contains only order and stability and usually has large amounts of sick leave built up "just in case."

(3) The person whose main orientation to life is to be as secure as possible will usually go by the book, so it is a total waste of time for a safety manager to approach him about doing anything at all innovative or different; if it is not in the book, he will not consider it. Even if it is in the book, he will want permission and signatures from at least two or three people above him on the organization chart to cover him if anything goes wrong. However, one way to get this type person to cooperate with you is to point out how upset his boss or the commander will be if this matter isn't taken care of, and to outline the trouble he will be in if he doesn't handle the situation before his boss becomes aware of it.

c. The love-belonging needs. When the physiological and safety-security needs are met more or less on a sustained basis; when you know where your next meal is coming from and you are not continually frightened by the people and events around you, needs for love, affection, and belonging emerge. According to Maslow, everyone will want affectionate relations with people in general as well as a place in his group; and he will strive with great intensity to achieve this goal.

(1) There are adults who are group-oriented, people who for one reason or another do want to be along or who avoid solitude like the plague. These people seem almost to derive their sense of identity from the group or groups to which they belong. They like to have their family around them at home, their associates with them at work (particularly at lunch they will go to great lengths to lunch with others and are appalled at the thought of eating alone), and they are usually great joiners. They belong to the Elks, Masons, Junior Chamber of Commerce, etc.; they like to be in groups for bowling leagues and golf games. They have, in fact, so arranged their lives that they are never alone. One of their great fears, an eventuality which might even make them ill, is to be ostracized from one of their groups. To avoid that horrifying prospect they will "go along" with the group, they won't protest at group decisions, and even if some action taken by the group makes them slightly uneasy, they will participate.

(2) Young people usually go through a "group period" on their way to adulthood. Parents of teenagers are frequently chagrined to learn that their words of wisdom fall on deaf ears if they are contrary to the dictums of their son or daughter's group. The safety manager can sometimes take advantage of young soldiers' needs to belong to groups. If the safety manager can get the group leader "on his side" by offering to help the group reach its own objectives, the other members of the group will go along with the leader. This has been particularly effective in forming motorcycle clubs on posts.

(3) Although healthy, mature persons will participate in groups and like to be with other people, they will not exhibit the compulsive need for others that those who are "hung up" on this need will show; and they will not go to great lengths to avoid solitude.

(4) Dr. Maslow put the "love" and "belongingness" needs together, as being two sides of one coin. The needs for belonging were discussed above; let's take a look at love needs. To begin with Maslow did not equate love with sex. He includes sex with the physiological needs; by the term love, Dr. Maslow meant a healthy, loving relationship which includes trust. In a good love relationship, there should be a lack of fear, a dropping of defenses so that we allow another person to get close to us. Maslow felt the love needs are extremely important in producing a healthy, mature individual. The love needs include both giving and receiving love.

(5) Love is important, there is no denying that. Most of us want to form a warm, lasting relationship with another person; it is even doubtful that an individual can attain full humanness without giving and receiving love. However, you cannot love someone into doing something that you want done. You may love your wife devotedly but it does not necessarily follow that she will balance the checkbook for you. You may love your son to the point of distraction, but he may or may not get a haircut for you; you may worship your commander but he may or may not support your safety program for you. In other words, love may very well make the world go around; but there are some points at which it is valueless in getting the things done that you want and/or need done. You cannot love your commander and other staff officers into supporting your safety program.

(6) However, you certainly cannot hope to get anywhere if you turn the coin around and try to hate, or more reasonably, gripe at your commander until he supports your

program. If one thinks of "love" as a positive friendliness, it is possible to get some support for your program. This concept is discussed in the next section.

d. The esteem needs. The next set of needs which surface after the physiological, safety-security, and belonging-love needs are more or less satisfied on a regular basis are those that Dr. Maslow referred to as esteem needs. There are two categories of esteem needs--self-respect and esteem from others.

(1) Self-respect includes such things as the desire for competence or mastery of something, a wish to be adequate to and confident of meeting most of the demands encountered in life, a sense of achievement both for jobs well done and for a life well lived, and independence and freedom to choose, hopefully wisely, among the various opportunities offered by life.

(2) Most of us have, at one time or another, felt inadequate, felt that for some reason, we just did not have the ability or competence to handle a task or situation. It is not a pleasant feeling. Generally speaking, we all want to feel that we're pretty good guys, that we are intelligent, and are pretty much in charge of ourselves and our surroundings, that we are not being buffeted about by unknown forces or events which are beyond our powers or understanding. All of us have had that marvelous feeling of accomplishment which comes from having done a job of cutting the grass or from having solved a particularly knotty safety problem with intelligence and efficiency. That is one of the joyful times in our lives. Likewise, we have probably all had the unpleasant, sinking feeling in the stomach that tells us we goofed, usually accompanied by the searing thought that even our own loving mother would have to admit that we really blew this one. Since one reaction is pleasant and the other unpleasant, we all strive for the good-job-well-done feeling and hope to avoid that other miserable one. When the good jobs outnumber the goofs, we get the feeling of self-respect that we all hope to achieve.

(3) Part of our feelings of self-respect come from the way we are treated by others. If everyone treats you as though you are one of the world's prize idiots, you will soon have great difficulty in not believing it yourself and your self-respect will take a nose dive. On the other hand, very few of us qualify for that prize; most safety managers are good guys struggling along trying to get a job done. The problem is that, in the past, we have not garnered to ourselves great bunches of prestige. And that's what the other category of Maslow's "esteem needs" is all about. We all



want respect from others, prestige, recognition, acceptance, attention, status, a reputation for being a good guy to deal with, and appreciation for good work. However, the most stable and healthy self-esteem comes from deserved respect from others, not from unwarranted adulation or fame. In other words, the guy getting the attention has to feel that he has earned it if he is a mature, psychologically healthy person, or he will interpret the respect as phony.

(4) There are more people tied up in this "self-respect-from-others need" than in any of the other categories Maslow postulated. A good many managers "run" because they want status and prestige. The majority of things they do is to protect or build up their self-respect and to convince others that they are deserving of any appreciation and attention they might get. It is quite possible that most of the managers you will deal with are running in the prestige-status maze of their particular little rat race. If so, one of the ways you can appeal to this type person to aid you in getting safety objectives accomplished is to convince them that it will be feather in their cap, a pat on the back for them to accomplish something before the "old man" has to bring it to their attention. On the other hand, you're dead if you approach them with a request for help in your program. These people are the prototype of the "What's in it for me" people; they will only support you when they see that there will be recognition and appreciation accruing to them by supporting your safety program.

e. The basic needs. The needs just discussed in Maslow's hierarchy of needs are usually referred to as the basic needs; those desires and wants which must be met on a more or less sustained basis before an individual can proceed on to full psychological mature health. Most of the people you and I know and deal with are running because they are motivated by the desire to fulfill these basic needs.

(1) These basic needs generally emerge in the order listed, but there are exceptions. Some people may seek self-esteem more than love from others. These people will stubbornly stick to their own solution to a problem, to doing what they think is right, regardless of how infuriated others, including bosses and associates, become with them; or how often someone points out that it cannot be the correct solution. There are many historical examples of people who became martyrs to an idea, in complete disregard for their own basic needs. As previously pointed out, there are others who are so dominated by the group(s) to which they belong, they

will go against their own better judgment in order to remain a member of the group. In other words, it is possible to have an overall orientation to life centered in one of the basic needs described above, so much so that the other needs take second place.

(2) In addition, the basic needs should not be viewed as though there were clear-cut lines between each set of needs. Don't assume that the need for security does not emerge until the need for food is entirely satisfied, or that the need for love does not emerge until the need for safety is fully satisfied. Most people have partially satisfied most of their basic needs, but still have some unfulfilled needs remaining. These unfulfilled needs influence behavior; once a need has been gratified on a sustained basis, it no longer motivates behavior.

(3) Those individuals who have been fortunate enough to be born to circumstances enabling them to satisfy their basic needs develop such strong unified characters that they can then withstand the loss or frustration of these needs for considerable lengths of time. Gratification of these basic needs very early in life, especially the first two years, is very important. People who have been made secure and strong during the early years in their childhood tend to remain secure and strong thereafter in the face of whatever threatens.

(4) After determining that the basic needs must be met in order for a person to be a reasonably healthy, mature individual, Dr. Maslow discovered that there are some people (only a relatively few) who have so solved their basic needs on a regular basis, that they are only motivated by a high category of desires. This higher order of needs he called "growth" needs. By growth, he means constant development of talents, capacities, creativity, wisdom, and character. Growth is the progressive satisfaction of higher and higher levels of psychological needs. Maslow feels that man shows in his nature a pressure toward fuller and fuller being, toward more and more perfect actualization of his humanness in exactly the same naturalistic scientific sense that an acorn may be said to be pressing toward being an oak tree. Maslow calls this psychological need for growth, development and the full use of the potential with which you were born, self-actualization. He discovered that self-actualization generally emerges only after a reasonable satisfaction of the love and esteem needs.

f. Self-actualization. The actualization process means the development or discovery of the true self and the development of existing or latent potential. An individual who has

reached this stage of maturity is in a dynamic, not static, process of becoming more and more of a psychologically healthy human. The average nonactualizing person is motivated by deficiencies; he is seeking to fulfill his basic needs for safety, belongingness, love, respect, and self-esteem. The healthy, mature, self-actualizing person is primarily motivated by his need to develop and actualize his fullest potentialities and capacities. In the highest meaning, a self-actualizing person can be said to be "doing his own thing."

## APPENDIX B

### The Lackland Project

The Lackland Project was conducted by two research psychologists hired by the Air Force. They determined that alcohol played a key role in POV fatalities at Lackland Air Force Base. They decided to create a motivational atmosphere that would discourage the behavior of drinking to the point of significant impairment and driving. There were four basic program elements:

1. The commander's announcement of the program via command letter and publicity.
2. The "tagging" program under which any driver involved in a POV accident with fault would be "tagged" for a records review by his commander, supervisor, the PMO, the surgeon, and the safety office. The commander would then make a service retention decision and inform the individual.
3. The psychiatric referral by which a driver involved in an POV accident with fault is first counseled by his commander and then referred to the Mental Health Clinic for treatment.
4. An education and promotion program using posters, the post paper, daily bulletin, etc.

Notice that the program impacted only on the driver involved in an accident with fault, but the incident and its aftermath (minus names) is widely publicized to all personnel. The program produced the results shown in the chart despite the fact that all other POV accident statistics for the Air Force, San Antonio, Texas, and other military organizations in the San Antonio area were higher.

This well documented success is an example of what can be achieved by well-designed motivation countermeasures.

## THE LACKLAND PROJECT

### Program Elements

1. Commander's Memo outlining tagging and referral programs.
2. Follow up publicity.
3. "Tagging" review by squadron commander, provost marshal, surgeon, safety officer, supervisor.
4. Psychiatric referral.
5. Education Program - 18 items for various distribution.

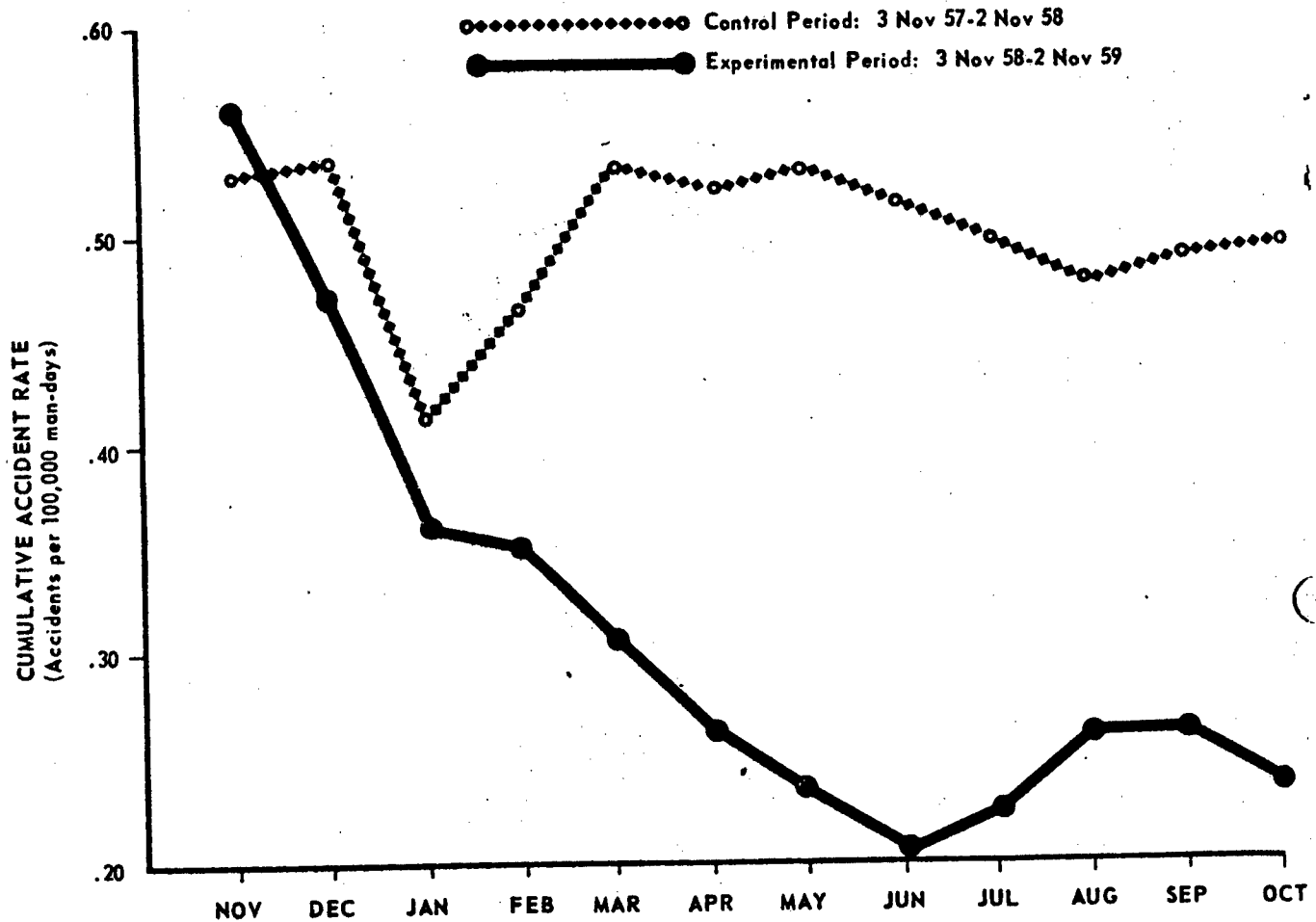


FIGURE 1.-Cumulative accident rate during the experimental and control years.

Cost: Under \$5,000 for entire year.

Benefit: Minimum \$126,000 (21 injuries voided).

Expected (5 fatalities, 16 injuries avoided): \$446,000

Ratio: Minimum 25:1 Expected: 89:1

## APPENDIX C

### Group Motivation

1. INTRODUCTION. Dr. Maslow has given us insight into the behavior of individuals, but let's take a look at behavior patterns of individuals who have gathered into groups. Within any working environment which contains more than one person, an unseen kind of group exists within the format structure. This informal group structure is as important as the official structure and, in many cases, it is more important.

#### 2. FORMAL GROUPS.

a. The best example of a formal group is the organization chart. This chart of the formal structure of an organization is, in reality, a task chart and not a people chart. For instance, the safety manager slot on the chart does not really refer to the particular person who is the safety manager-- instead it refers to a faceless entity who should possess certain qualifications which will enable him to perform the tasks considered necessary by that title. The same holds true for other titles on the organization chart. The facilities engineer slot may have a name after the title, but there will continue to be a facilities engineer listed on the chart even if the present holder of the job quits, retires, or dies. Another person who fits the qualifications felt to be necessary for the job will replace the former facilities engineer and life goes on.

b. This is obviously a very efficient method of arranging the tasks necessary to effectively operate a business of Government organization, but it is highly impersonal. People as individuals are not considered important at all to this tasking list; it is even assumed that individuals are completely interchangeable, somewhat like parts in an automobile. If the spark plugs on your car wear out, they are simply replaced by new ones and the automobile continues to run effectively.

3. INFORMAL GROUPS. People, however, are not as exactly alike as spark plugs. The present safety manager may possess certain qualities of humanness in his personality that his replacement does not have, even though their professional qualifications may be the same. And, because of this humanness, individuals placed into work situations do not stay isolated from one another. Informal groups form whenever people work together over a period of time; this group is a

network of personal and social relationships that arise spontaneously as people associate with one another. This informal group is not just a random collection of persons who share the same office or barracks; the group develops out of face-to-face contact and is usually confined to one or two levels of the formal structure. This group commands loyalty, dispenses social satisfactions, and enforces standards of behavior on its members. Each group has its own leaders and status systems, a role structure that is apart from the official one, even though it is influenced by the formal structure.

a. Another aspect of the informal group is the unofficial rules that emerge from a general sense of what is right and proper. Some of the rules apply only within the one small group, such as it being expected that everyone will contribute something to buy a going-away present for a member who is leaving; but other rules extend beyond the immediate small group to other divisions and echelons of the formal organization. These may regulate the way the job is done--agreements on what constitutes a fair day's work, which formal rules can be ignored, and what is or is not deemed proper work behavior. The implications here for a safety manager are very apparent--safety rules considered appropriate by an informal group will be followed; those that are not considered important will not be followed!

b. The human need for this informal structure becomes apparent to the recruit on his first day in the Army or to the new employee in a large Government office. He arrives unknown, unrecognized and the interests and idiosyncrasies that are unique to him are ignored; suddenly he is a number, an anonymous replaceable cog. Without even thinking, he resists this depersonalization and tries to get some form of humanity into his new surroundings. The recruit may make a wisecrack to the next man in line; the new employee may introduce himself to someone at the next desk or ask a question. Both newcomers are seeking friends, a social system to fit into, and they will watch others for clues on how to behave. When they have found these clues, and start to pattern their actions after the behavior of others around them, they have taken the first step toward joining the informal structure.

c. In a large office or barracks, a person may feel as though he is just a number but the informal group gives him personal attachment and status. With them, he is somebody, even though in the formal structure he is only one of thousands. The informal group can give more meaning to his day. When he can think of meeting his friends, sharing their jokes and eating with them, his day takes on a new dimension that makes easier any disagreeableness or routine in his work.

d. The power of the informal group comes mainly from its ability to accept those who follow its rules and to reject and discipline the individuals who do not. Just as the official hierarchy can punish "bad" workers, the informal organization can mete out the ultimate punishment of ostracism and isolate the wrong-doer from the social benefits of the group. Ostracism and isolation are powerful weapons. For years, at the US Military Academy at West Point, cadets who were suspected of violating the honor code were punished by a now-abandoned form of isolation called the "The Silence." The offender was rarely spoken to, he ate and roomed alone, and his possessions were vandalized; it was a rare person who could withstand such treatment and many such cadets resigned.

e. One drawback, however, to this form of punishment for nonconformers is that such a banished person is no longer under the control of the group, so such extreme punishments as ostracism and isolation are usually only a last resort. More usual punishments are milder versions of the natural things people do when they are angry: finding fault, making sarcastic or cutting remarks, giving short answers to questions, or ignoring the usual friendly rituals which have been established between members of the group. Many persons can withstand these tactics when they come from just one angry friend but they are much more serious when they are used by the group. Peter Blau, a Columbia University sociologist who studied working groups in the Federal Government, reported that when members of a group laugh together at ridiculing statements directed against one member of the group, the victim is thrown into a state of rootlessness and feels alone and confused, while at the same time, he is witnessing the togetherness and strength of the group. This kind of threat is overwhelming to many people and they will drop whatever different practices or beliefs brought about the attack.

f. Most of the punishments mentioned have some degree of exclusion from the group; therefore, they only work effectively on the person to whom it is important to belong to the informal group. Those to whom it is important are frequently extremely loyal to the group; such loyalty to the informal group can be the cause of heroism in combat. The soldier who throws himself on a grenade or wildly charges an enemy position is frequently motivated by loyalty to the individuals in his unit, by his wish to help or to save his buddies. This kind of loyalty--to the individual members of the group rather than to an idea or to a leader--is what holds informal groups together. There are two sources for this loyalty: shared experience and social compatibility. If the group is strong, both elements are almost always present.



g. Young people are particularly prone to being group dominated, to being influenced by group standards and dismayed by group retaliation for deviant behavior; but because of our humanness and need for social contact, all of us are more or less influenced by the groups to which we belong. It should also be recognized that individuals can satisfy many of the needs Dr. Maslow described through groups. For instance, in a primitive society where the need for food is a recurring problem, the members of the group frequently band together and share the getting and the distribution of food, thereby solving the physiological needs of the individuals through group effort. Some of our modern-day back-to-nature groups of young people use this principle extensively; everyone works so that everyone can eat.

h. Many of us are aware of how many of our safety-security needs are met through others. In most stress situations, people turn to other people for help and solace. National Aeronautics and Space Administration (NASA) experiments in isolation have confirmed that most individuals have great difficulty adjusting to total aloneness, and many persons exhibit symptoms that are generally associated with mental illness after prolonged isolation. One of the big problems discovered during WWII of soldiers in combat was that no matter how many times they had been told to scatter and keep widely separated distances when under fire, the soldiers tended to bunch up. Once again, under a stress situation, people tend to group together for psychic comfort although it was repeatedly proven that many more soldiers died that way than if they were separated by distance.

i. Of course, the belonging needs are obviously satisfied by being a member of a group, but sometimes love and/or friendship needs are also met through a group relationship. Many former servicemen will readily admit that they formed such a close attachment to a buddy during their service days that they would have died for him, and many other people have formed the only close friendships of their lives with one or two persons who are in their group.

j. Groups frequently fulfill the esteem needs of an individual. This is particularly true for those persons who are in a work situation which does not give them a tremendous sense of satisfaction. Their worth to the group can give them a sense of self-esteem, and the worth the group attributes to the individual can satisfy his need for respect from others. In addition, if the group has prestige among other people, an individual member can have a reflected sense of prestige from belonging to it.

k. Individuals frequently solve a good many of their needs through their interaction with informal group members and the group exerts tremendous influence on their behavior, extending to other realms of their life in addition to their behavior within that particular group.

4. INFLUENCING GROUPS. Because these informal groups are so important to so many people, a safety manager has at his disposal a powerful tool for influencing safe behavior. There are two ways to go about tapping into this power--deliberately bringing into existence, or attempting to influence groups that are already in existence.

a. An example of bringing into existence a group in order to further your safety program effort is one used by a safety manager at a troop installation. This manager was appalled by the number of motorcycle accidents that young soldiers at his installation were having, some on post, but most were occurring off post during nonduty hours. By checking into the matter, he discovered that many young soldiers were solving the problem of relatively small amounts of income and the desire to have private transportation by buying a motorcycle. Unfortunately, a good many of the young men had never previously ridden a motorcycle. They would buy the cycle, get on it, and ride out of the shop. He discovered that a very high percentage of the motorcycle accidents occurred within the first ten days after the young man had bought his cycle. This safety manager requested and obtained permission to put on recurring ten-hour motorcycle training sessions, and that a soldier could not get a post sticker to ride his cycle on post until he produced his certificate of training from such a session. The training sessions themselves covered riding techniques, basic maintenance procedures, and safety information. This innovative safety manager then talked a local motorcycle dealer into donating two motorcycles for use in the training sessions by pointing out that many of the soldiers would take the training before buying a cycle and would then be quite likely to buy the same kind they had used in training.

b. Soldiers who took the training sessions became friends, and as friends, got together to discuss motorcycles as well as to ride together. A motorcycle club was soon formed, with the safety manager giving as much help as he could. Eventually, he requested and got permission to use an isolated section of the post for a motorcycle cross-country race track and the motorcycle club members then donated their time to build it. Regularly scheduled races began which not only were fun but further increased the skill of the riders. The safety manager

arranged a promotion campaign through the daily bulletin and the post newspaper and even persuaded the commanding general to ride the course while photographers from local newspapers took pictures which were used with a feature article in their papers. The number and severity of motorcycle accidents dropped and a good many soldiers found a great deal of enjoyment and friendship in the previously nonexistent club.

c. An example of using and influencing existing informal groups to further the safety effort is one used by another installation safety manager. After a series of home type accidents occurred within the post's dependent housing, he discovered that many of the wives living in the housing had an informal Thursday morning coffee get-together. He talked with one or two of the ladies and asked permission to talk at the coffee "klatch" about how to avoid some of the more constantly recurring home accidents. They were delighted. He worked up an interesting 15-minute talk on one of their big problems, defective appliances, and answered questions on how they could get some of these appliances repaired. He then established a schedule of dropping in once a month at the Thursday coffee to informally discuss other safety techniques. He discovered that many of the mothers were concerned about the safety of their children riding bicycles on post. He set up a bicycle inspection program with some of the fathers on Saturday morning complete with a decal safety sticker showing that the bike had passed inspection. The next step was to begin a bicycle training session on Saturday mornings, which he ended with a bicycle rodeo. Youngsters who passed the training session were given wallet size certificates of expertise. A cross-country bike riding club was formed by many of the parents and their children--one or two jaunts took place on weekends. The safety manager arranged for publicity for the training sessions, rodeos, and cross-country jaunts in both on- and off-post publications. The number of home accidents dropped as well as the number and severity of bicycle accidents, and a lot of people had a lot of fun.

5. TECHNIQUES WITH GROUPS. Whether you plan to influence existing groups or try to bring into being new groups, there are some techniques for getting their aid in your safety efforts.

a. Identify and get to know the group leader. This is a particularly vital step, since many of the members of any small, informal group will follow the lead of the unofficial leader. Almost all small groups have a leader even if the members of the group do not formally acknowledge the person as leader.

b. Discuss with the leader and members of the group the group's objectives and goals. It is necessary to become friends with the leader and some of the key members.

c. Determine parallel interests by comparing the group's objectives with yours. For example, the safety manager with the motorcycle problem had an objective of reducing the number and severity of motorcycle accidents; one way of doing this was to increase the skill of the riders. The motorcyclists themselves were primarily interested in increasing their skill and having fun. The common ground between the two was the increased skill, so the safety manager used that as his wedge into the group.

d. The key to the whole concept of influencing informal groups is to establish that the safety program can and is interested in helping them achieve their goal objective. You need not hide the fact that your interest is also in furthering your safety program; but it is important that your approach be how you can help them, not how they can help you.

## APPENDIX D

### POSITIVE REINFORCEMENT

Positive reinforcement means simply strengthening (reinforcing) desired behavior so that it will more likely be repeated. Since it concentrates on desired rather than undesired, it is called positive.

#### EXAMPLES

The following are examples taken from Emery Air Freight (EAF) literature. The reader should be able to adjust his thinking and quickly see that these examples have relevance to safety situations.

A customer service supervisor distressed by the agents' slow response to answering the phone in 30 seconds, waited until an agent answered the call promptly, praised each agent three times a week for a month. In just four days the agents were answering 80 percent of the calls in just five seconds.

A regional manager bothered by the manager's failure to submit reports or to submit them on time switched from criticizing to praising the manager for anything done right. On time compliance jumped from 62 percent to 94 percent.

A customer service manager faced with a problem of a slow pickup in the downtown section of a major office praised the drayage agent for any improvement in terms of pickups made in just 60 minutes as reported in a daily feedback report. Pickups made in 60 minutes rose to 80 percent and business increased substantially faster than the system region or local office.

One manager wrote the airlines on their failures to board the set-up flights. The airline boarded more of the flights. Two days later the airline dockmen were very slow in unloading the Emery trucks, long delays ensued and flights at other airlines were missed. Next day recoveries of inbound freight worsened.

At another office the manager wrote the airlines praising them for 90 percent success in boarding the set-up flight and mentioned the standard of 96 percent. Flights boarded improved, cooperation improved in locating missing freight, recoveries improved.

An Emery manager, faced with a subordinate who reacted adversely to any new idea and with resulting performance deficiencies caused because improvements were not made, praised the subordinate for the ideas he accepted and for prompt implementation. In four weeks when a new idea was broached, the subordinate's hand was observed to instantly shoot out for a telephone to implement the idea.

Two customer service units faced with high absenteeism rates did not comment on poor performance but praised each girl when they came to work each day this week. "We are shooting for a standard of 96 percent or higher." Attendance rose to 96 percent.

A customer service manager constantly faced the problem of the AM trucks leaving on time. A typical day: 4 trucks out of 23 left on time. The dispatcher and dockmen were asked to measure their own performance each day. Each day the performance was praised. One week later, 23 out of 23 trucks left on schedule.

One manager reinforced his regional manager for approving his ideas. Previously, the manager was on the verge of quitting because he couldn't obtain approval of essential things he felt he needed to be a success. Today the regional manager approves 80 percent of the proposals.

Examples of Emery managers using reinforcement in the home.

(Managers often test it in the home, followed later in the office.)

One sales manager resisted positive reinforcement. Faced with the ordeal of bringing his five-year old son to the dentist, he role-played the experience praising the child for any behavior desired, i.e., being brave, not crying, etc. The son never cried when he went to the dentist but instead bragged about his experience. The sales manager soon applied positive reinforcement to business and now is one of our strongest proponents.

One tall regional sales manager was always banging his head into kitchen cabinet doors left open by his wife. A string of cuss words led to an equally negative response. He heard of positive reinforcement, began praising his wife as follows: "Very good, five of eight doors are closed." His wife reports that she soon began running around shutting doors. She says, "I knew he was reinforcing me. He would even tell me he was reinforcing me. But I loved it."

Autistic children who do not talk or read and who display serious anti-social behavior will in three months be talking, reading, and playing naturally with other children.

#### WHAT TO REINFORCE

1. Talks about performance problem even though he doesn't do anything.
2. Admits there is a problem.
3. States he was thinking about a solution even though no solution was conceived.
4. Tries, but fails.
5. Does it right one time out of a hundred.
6. Measures performance and finds it is poor.
7. Asks a question about how to do it.
8. Offers a solution which couldn't possibly work.
9. Reduces the amount or degree of negative behavior.
10. Completes it or does it correctly even though late.
11. Does part of it correctly.
12. Merely mentions the subject matter.
13. Recognizes he made a mistake.

## SAFETY APPLICATIONS OF REINFORCEMENT

### 1. In the safety office.

- a. By the boss to improve employee performance.
- b. By the employee to improve boss performance.
- c. To improve staff section and commander cooperation with safety objectives.

### 2. In the command structure

- a. To enhance performance of subordinate safety staffs or part time personnel (the backpatter).
- b. To enhance key personnel performance directly or indirectly, i.e., by the safety office or through supervisors.
- c. In promotional material directed at troops.

### 3. In interpersonal relationships

- a. To enhance communications effectiveness.
- b. To improve "personality power."



## APPENDIX E

### Safety Promotion

#### 1. INTRODUCTION.

a. It is sometimes necessary to try to influence masses of people toward a safety objective, somewhat like advertising campaigns try to influence lots of people to prefer a particular brand of a product. In the past, safety promotion campaigns have not been particularly effective. Large amounts of money are sometimes spent on posters, pamphlets, and gimmicky small awards, none of which is particularly effective. But safety promotional efforts can be an efficient way of getting a message to a great number of people if the promotional material is prepared properly.

b. Psychologists have been helpful in the promotional area. Since most people's behavior is an outward sign of an attempt to satisfy needs, any attempt to change behavior must take a look at the probable need underlying the behavior. In other words, if you're trying to use a carrot on a stick to get a donkey to move, you had better know several things about the donkey. How hungry is he? How tired is he? How heavy is the load he's to pull? How much does he like carrots? The wrong answers to any of those questions will make your incentive completely ineffective. You will not have provided the physical or emotional climate which will motivate the animal to move.

2. A TEN-POINT PROGRAM. Using the findings by psychologists, a ten-point program of safety promotion principles has been developed to aid you in conducting an effective promotional campaign.

a. Coordinate the promotion program with other countermeasures activities. A promotional campaign is only an adjunct to an overall countermeasures program. Buying a few posters and sticking them around on bulletin boards is not a promotion campaign. However, if you have a specific topic which you are trying to bring to people's attention and are using other countermeasure efforts to get the point across, posters and other promotional media may be quite helpful.

b. Relate the message to an accident cause factor. General type messages have been shown to be almost totally useless. Slogans like "Drive Safely" are too broad and do not affect most people who already know they should drive

safely, or who feel that they do drive safely. For the same reason, slogans like "Wear Seat Belts" can be ineffective. Specific reasons for wearing the seat belt or specific ways of driving safely are much more likely to make an impression.

c. Define a specific target group for each promotional item. A general purpose message which will appeal to all age groups and all levels of personnel tends to lose all the people, whereas an item designed specifically to appeal to just one segment of your population can be a remembered and followed message. Advertising agencies are particularly good at this technique; they do not try to sell a product to everyone, but decide what age or income group would be most likely to purchase the product and then design their campaigns to appeal to that group.

d. Use symbols which are effective with the target group at which the message is aimed. The type things considered important or pretty or necessary for young people under 25 are greatly different than those of the 25-50 age group or the over 50 group. Music, colors and topics should be designed with the proper group in mind. The language used should be meaningful to the group aimed at, and the message should be one that the target group can identify with.

e. Develop a message that fills the needs of the target group. For example, safety-security needs are not as important to a young married person as they are to a person with a growing family. Also, the self-respect needs of a 19-year-old single person are greatly different than the self-respect needs of a 65-year-old retired person. The things that will satisfy the recognition needs of a career Army major are greatly different than those that will satisfy the recognition needs of a one-time PFC. To be effective, the message must appeal to and offer a means of satisfying the needs of the target group.

f. Retain credibility. It is necessary to present only factual information in a promotional item; otherwise, once your target audience finds out your information is unreliable, they will disregard any information you put out no matter how factual it is. This was particularly apparent in the drug awareness promotional efforts when they first began. Many items were released which used scare tactics and biased facts in order to stop the drug abuse problem. Once the young people at whom the items were aimed discovered from medical authorities that many of the facts were distorted, they did not believe any of the facts released, even though most of the later ones were

valid. By alienating the target audience in that manner, many young persons did not use the information and the drug abuse program suffered a real setback and had difficulty overcoming this initial handicap.

g. Don't overload. By flooding the target group with messages on one topic, it is sometimes possible to alienate them by just the numbers of items. It's somewhat like nagging--a couple of reminders to do something may be helpful but a constant harping on the subject gets old and irritating. It is necessary to put out enough information but not so much that the entire message is lost or overlooked.

h. Use effective, innovative media. Most people think of posters when planning a promotion campaign, but posters should only be a small part of the total effort. Recently, a group of safety managers brainstormed a problem of 23 deaths among young enlisted men from privately owned vehicle accidents. None of the 23 had their seat belts fastened; at least 22 of the 23 would have survived the accident if their seat belts had been in use. Along with other countermeasure techniques, this group of professionals decided to have a promotional campaign and the following ideas were suggested for use:

(1) Symbols which they decided would be effective with young enlisted men--

(a) Bright colors, particularly combinations of orange/yellow or blue/green.

(b) Parodies of well-known rock groups and reworded rock songs, or themes from current rock/pop songs.

(c) Young girls, either the sexy image or the current "All-American" look.

(d) Words or phrases which are currently "in" with young people; e.g., uptight, get yourself together, etc.

(e) Anything which can be tied in with the strong assertive masculinity usually denoted by the term machismo. Such as "hot" cars, racing or race drivers, "cool" or "tough" men, and sexy girls. These images have been very effective in the advertising field in selling many products from cigarettes to men's hair spray. Most young men want to identify with the "macho image."

(f) Popular cartoon figures, such as "Peanuts" or the "Roadrunner" are very well-liked among young men. They may be attracted enough by the figure to read what it is saying.

(g) "In" clothes or images, such as jeans and boots with a denim shirt, or the Nazi helmet image so many young people find interesting. One suggestion for a poster was a picture of a skull wearing a Nazi helmet pictured above a smoking crashed sports car, with the caption--"He was tough--but not tough enough."

(h) There has been a well-publicized generation gap and in many cases there is indeed a gap in the values, interests, and ideals of younger and older persons. Any caption or picture which points up the follies of the older generation will usually catch the eye of young people. An idea suggested here was that a 40 or 50 year old man, obviously drunk, standing next to a crashed car and shaking his finger at a teenager who is staring at him, with a caption--"Now, see! I tole' ya, you shouldn' drink and drive!"

(i) Many young people are involved in the "brotherhood-of-man" concept and in the ecology movement of keeping the environment clean for future generations. Anything which ties in with either of these concepts may be very appealing to young people.

(2) Once this group of safety professionals had determined the symbols which would be effective with the target group (young males), they brainstormed the type media which could be used to reach the selected people. Following are some of their ideas:

(a) Using the symbols mentioned above, several hand-out items or items for purchase can be developed. For example: keychains, compacts or pens; T-shirts with a picture-message printed on the front; "fake" money, either paper or "silver" dollars; bumper stickers or auto dash stickers; match books; or handout slips of paper. There is nothing particularly new in the above suggestions, all have been used; however, the symbols used are the difference. If the symbols are attractive to the target group, they will want to possess the item; if the symbol used is not designed specifically for the target group, it will be ignored. For instance, one safety manager spent a great deal of money purchasing ball-point pens with the green cross of safety on them and the slogan "Drive Safely." He had a terrible time getting rid of them on a troop post. Young people were not impressed with either the symbol or the slogan.

(b) Some gimmick promotional media which might appeal to young persons are--

1. Spot checks by MPs who hand out redeemable coupons to movies or sports events if the driver has his seat belt fastened.

2. Spot checks by MPs, in association with a pretty girl (handsome fellow) who kisses the young driver if his seat belt is fastened.

3. A variation of the two above is handing out redeemable coupons for collecting kisses at a kissing booth, followed by a radio, TV, or newspaper interview with the young lady (or young gentleman) on various techniques of kissing.

4. A group of nice-looking (by young people's standards, not necessarily your standards--they may be different) "cheerleaders" who give safety cheers at the exit gates on Friday evenings, with advance and follow-up publicity.

5. A more total and more macabre promotion campaign suggested by one military man in the brainstorming session was that of the "Ghost" platoon. It included required attendance at one movie a week for 23 weeks of each of the 23 victims' funeral, a week long display of each wrecked vehicle with a blown up picture of the young man who died in the vehicle (not, of course, an "after" picture), 23 empty seats at all assemblies and 23 empty spaces at formations for 23 weeks, and displays of unbuckled seat belts below an 8x10 picture of the 23 men. Granted, this would indeed bring home the message, but since presumably there would be several other soldiers who had been very close to those who were dead, such an emotionally overloaded campaign might very well be too much for some people. It would be well to be cautious in designing this type campaign.

(c) The third major type media determined by this group to be effective with young people, using the symbols already described, was an out-and-out advertising campaign. Examples are--

1. Short movies (about cartoon length) with a safety message which would be shown before each feature at the post theater.

2. A stage show, either originally written or a parody of a current successful hit; either serious, comedy

or even a musical, which has a safety message instead of the one originally written.

3. One or two sentence spot announcements on radio or TV with someone imitating the voice of a current "star", such as Archie Bunker, Charlie Brown, or Hawkeye from MASH, but without mentioning names. Or, same idea only use professional race drivers to record the short blurbs.

4. Ads placed in post publications, Army magazines, or local newspapers which are caricatures of popular commercial product ads. Or, just straight ads, without caricaturizing current commercial ones.

(d) Above are some of the ideas which were developed in a brainstorming session, the purpose of which was to come up with innovative symbols and media which would be effective with a particular target group. You, too, can think of many, many types of things to use with your target audience; it is not necessary to have a few outdated, general purpose posters hanging in obscure places and call that the promotional effort of your safety program.

i. Define a specific objective to a promotional effort, including what it should accomplish and how much. Before a safety manager expends any effort or money in any kind of countermeasure program, the objective should be in writing and the method of determining whether you have or have not reached that goal should be decided upon. It is best to state a goal in numerical terms, simply because it is easier to determine whether you have or have not reached the goal. A goal of "Trying to get more people to wear seat belts" could be an endless task and it would be difficult to measure progress, whereas a goal of "Increasing the use of seat belts among young enlisted people 25 percent" can be shown to have succeeded or failed. Of course, it is necessary to have before and after figures. In the case of the seat belt problem given before, a review of accident reports, MP spot checks, or questionnaires before the countermeasure program you designed against a specific safety problem was valid.

j. Elicit feedback from your promotional effort. If no one is looking at or paying attention to the items you use in your campaign, it's a waste of time and money to continue to use it. A questionnaire is a good way to check this; an even better way is to get out and talk with people and ask their opinion of specific items.

3. USING SAFETY PROMOTION. The preceding section has been a ten-point program to follow if and/or when you decide a promotion campaign can be a useful adjunct to a counter-measure effort against some particular safety problem. It must be reemphasized that the safety manager is just that--a manager, and as such is not expected to be an advertising genius. There are some safety professionals who get so carried away with the "artsy-cutesy" gimmicks of a promotional campaign that they do little else. A safety manager may indeed sometimes use promotional media, but it is not his main purpose in life!

## APPENDIX F

### An Application of the Motivational Model

**BEHAVIORAL PROBLEM.** Personnel do not wear personal protective equipment. Interviews establish that personnel are generally aware that they should wear it, but they don't. Hence, the problem is motivational in character. (They could and would do it if their life depended on it.)

**Task ID:** Review of accident reports indicates that this motivation problem is significant. Several accidents have involved failure to use the equipment. There are legal implications related to OSHA standards in this area. The problem appears to be widespread based on inspection data. It is considered a priority problem and is designated a motivation counter-measure target. However, there has been no precise guidance or SOP as to what equipment is required for what jobs.

**Remedies:** The safety office publishes a supplement to AR 385-30 iterating specific installation policy on where protective clothing and equipment is required. Key extracts from DA PAM 385-3 are supplied to all supervisory personnel to show specific standards.

**Task Assignment:** A review of the existing task assignment situation indicates that employees are advised more or less casually on the need to wear protective equipment when they receive their job orientation. Most employees indicate that it has been mentioned briefly a couple of times in the last several months. **Remedies:**

1. A requirement is issued to post signs where practical by each operation requiring use of protective equipment indicating the specific need for equipment.

2. The wording of initial job safety briefing is changed to inform employees that use of protective equipment in specific operations is mandatory. Employees in operations routinely requiring use of such equipment are required to acknowledge the requirement by initialing on a special notification form.

3. A special review is conducted to assure that the best available protective equipment from the point of view of comfort and ease of use, as well as effectiveness, is being used. This minimizes the inconvenience of equipment use and thus minimizes the motivation needed to assure regular use.



4. Posters and other promotional media covering the need for protective equipment and the requirements to use it are distributed.

Accountability: In reviewing the existing situation, it is discovered that supervisors do not require use of the equipment and that there have been no adverse actions resulting from accidents involving failure to use protective equipment. Remedies:

1. A letter is published indicating that OSHA factors require strict adherence to protective equipment requirements and describing mandatory punitive measures.

2. Special emphasis during inspections on checking use of equipment. Aggressive followup through the chain of command on all instances of lack of use. Disciplinary followup when appropriate.

3. Special followup investigation by the safety office on all accident reports involving failure to use the equipment.

4. Assure that all safety and senior management personnel scrupulously follow protective equipment rules.

5. Assure that all employees know of recent accidents resulting from failure to wear protective equipment.

Rewards and Punishments: No record of actions of any kind involving either rewards or punishments were found. Remedies:

1. Assure initiation of adverse actions whenever appropriate to correct employee or supervisory failure to follow procedures. Stress consistency of punitive actions.

2. Arrange for back patten letters to supervisors who have effectively implemented protective equipment requirements.

3. Explicitly request supervisors to regularly reinforce employees who use equipment properly.

PLEASE CHECK THE APPROPRIATE BLOCK BELOW:

- AO# \_\_\_\_\_
- ☐ \_\_\_\_\_ copies are being forwarded. Indicate whether Statement A, B, C, D, E, F, or X applies.
- ☒ DISTRIBUTION STATEMENT A:  
APPROVED FOR PUBLIC RELEASE: DISTRIBUTION IS UNLIMITED
- ☐ DISTRIBUTION STATEMENT B:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT C:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT D:  
DISTRIBUTION AUTHORIZED TO DoD AND U.S. DoD CONTRACTORS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT E:  
DISTRIBUTION AUTHORIZED TO DoD COMPONENTS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT F:  
FURTHER DISSEMINATION ONLY AS DIRECTED BY (Indicate Controlling DoD Office and Date) or HIGHER DoD AUTHORITY
- ☐ DISTRIBUTION STATEMENT X:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND PRIVATE INDIVIDUALS OR ENTERPRISES ELIGIBLE TO OBTAIN EXPORT-CONTROLLED TECHNICAL DATA IN ACCORDANCE WITH DoD DIRECTIVE 5230.25 WITHHOLDING OF UNCLASSIFIED TECHNICAL DATA FROM PUBLIC DISCLOSURE. 6 Nov 1984 (indicate date of determination). CONTROLLING DoD OFFICE IS (Indicate Controlling DoD Office).
- ☐ This document was previously forwarded to DTIC on \_\_\_\_\_ (date) and the AD number is \_\_\_\_\_
- ☐ In accordance with provisions of DoD instructions, the document requested is not supplied because:
- ☐ It will be published at a later date. (Enter approximate date, if known).
- ☐ Other. (Give Reason)

DoD Directive 5230.24, "Distribution Statements on Technical Documents," 18 Mar 87, contains seven distribution statements, as described briefly above. Technical Documents must be assigned distribution statements.

*Cynthia Gleisberg*  
Authorized Signature/Date

*Cynthia Gleisberg*  
Print or Type Name  
*DSN 205-558-2924*  
Telephone Number